



# #1 CAUSE OF PREVENTABLE DEATH, DISEASE, DISABILITY: TOBACCO USE/VAPING

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*Behavioral Health Advisory Board*

*Irene Linayao-Putman, MPH*

*5/2/19*





# OUTLINE



- The Data
- The Products: electronic smoking  
Devices/Vaping
- Key Issues
- Proven solutions





# WHY FOCUS ON TOBACCO?



## LIVE WELL SAN DIEGO

The County of San Diego has developed a long-term vision and framework to address the 3-4-50 phenomenon:



<sup>1</sup> World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." [http://www.who.int/dietphysicalactivity/media/en/gsf\\_general.pdf](http://www.who.int/dietphysicalactivity/media/en/gsf_general.pdf) (Accessed September 22, 2011).

<sup>2</sup> 3Four50, [www.3four50.com](http://www.3four50.com) (Accessed September 22, 2011).





# THE DATA

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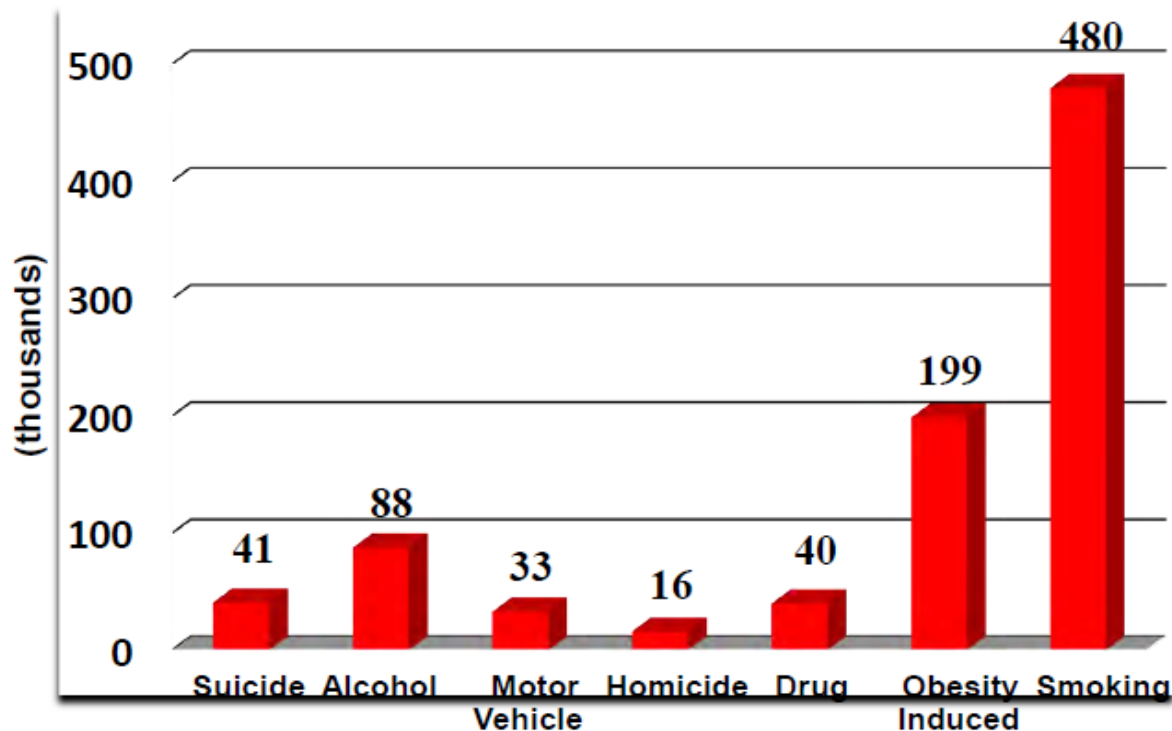




# TOBACCO IS #1 – WE CAN CHANGE THAT



## Comparative Causes of Annual Preventable Deaths in the US



Sources: (Suicide, Homicide) CDC/National Center for Health Statistics, 2013; (Alcohol) Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2013.; (Motor vehicle) Insurance Institute for Highway Safety, 2013; (Drug Induced) National Vital Statistics System, 2010; Am J Epidemiol 2004;160:331–338 (Obesity); (Smoking) Centers for Disease Control and Prevention; 2014





# Tobacco Use is the Primary Cause of Death Among Individuals With SUD







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SAN DIEGO



2015 Deaths and Estimates of Smoking-Attributable Mortality (SAM) for  
San Diego County Adults 35 Years of Age and Older

2015 Deaths and Estimates of Smoking-Attributable Mortality (SAM) for San Diego County Adults 35 Years of Age and Older, Total and by Gender

2013 Deaths due to Smoking-Attributable Mortality (Smoking for 30+ Years) Adults 35 Years of Age and Older - Total and by District		Males 35+			Females 35+			Total 35+ Population	
Conditions/ Diseases	ICD 10 Codes	Deaths	%Attributable fraction (%)	SAH	Deaths	%Attributable fraction (%)	SAH	Deaths	SAH
Lung cancer	C33-C34	507	0.84	425	487	0.81	393	994	818
Other cancers*	C00-C34, C15, C16, C18-21, C22, C25, C32, C53, C64-65, C67, C92.0	1,092	0.25	276	795	0.13	105	1,887	381
Total—Cancers		1,599	0.52	837	1,282	0.44	559	2,881	1,396
Coronary heart disease	I11, I20-I25	1,782	0.28	303	1,394	0.19	270	3,176	773
Other heart disease *	I00-I09, I26-I28, I50-I51	638	0.18	113	810	0.13	102	1,448	215
Cerebrovascular disease *	I60-I69	477	0.15	73	679	0.09	59	1,156	132
Other vascular disease *	I70-I74, I76-I78	92	0.41	38	104	0.35	37	196	75
Diabetes mellitus	E10-E14	587	0.18	68	322	0.08	25	709	93
Total—Cardiovascular and metabolic diseases		3,376	0.24	811	3,309	0.15	509	6,685	1,321
Pneumonia, influenza, tuberculosis	J09-J18, A16-A19	173	0.31	53	179	0.16	28	352	81
COPD	J40-J44	434	0.82	556	528	0.76	400	962	756
Total—Pulmonary diseases *		607	0.67	407	707	0.57	402	1,314	809
Total—Cancers, cardiovascular and metabolic diseases, pulmonary diseases		5,582	0.38	2,098	5,298	0.28	1,462	10,898	3,559
Prenatal conditions †	K55.0, P00.0, P01.0, P01.1, P01.5, P02.0, P02.1, P02.2, P07.0–P07.3, P10.2, P22.0–P22.9, P25.0–P27.9, P28.0, P28.1, P36.0–P36.9, P52.0–P52.3, and P77	43	0.06	2	37	0.06	2	80	5
Sudden infant death syndrome ‡	R95	8	0.17	1	1	0.17	0	9	2
Total Perinatal Conditions		51	0.08	4	38	0.08	3	89	7
Residential fires	X00-X09	3	1.00	3	3	1.00	3	6	6
Secondhand smoke									0
Lung Cancer	C33-C34	507	0.05	25	487	0.04	21	994	46
Coronary heart disease	I11, I20-I25	1,782	0.09	156	1,394	0.08	107	3,176	262
Total—Secondhand smoke		2,289	0.08	175	1,881	0.07	127	4,170	302
TOTAL Attributable deaths				2,280			1,594		3,874

THESE ARE THE TERMS OF SERVICE FOR THE WEBSITE. BY VISITING THE WEBSITE, YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE, YOU MAY NOT USE THE WEBSITE. FOR MORE INFORMATION, VISIT [www.irs.gov/efile](http://www.irs.gov/efile).

Holes drilled with undersize or no core were not included in the analysis. Drifts were pulled using 3048 ICD 40 codes.

SOURCE: CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, OFFICE OF HEALTH STATISTICS, OFFICE OF HEALTH INFORMATION AND RESEARCH, VITAL RECORDS BUSINESS STORAGE/RETRIEVAL SYSTEM (2022). PREPARED BY: COUNTY OF SAN DIEGO, HEALTH & HUMAN SERVICES AGENCY, PUBLIC HEALTH SERVICES, COMMUNITY HEALTH NEEDS ASSESSMENT UNIT, 08/29/23.

1000

Abbrev: COPD = chronic obstructive pulmonary disease.

2 - Other cavities consist of cavities of the lip, pharynx and oral cavity, esophagus, stomach, pancreas, biliary, urinary

b - Other heart diseases comprised of rheumatic heart

c - Cardiovascular diseases ICD-10 Codes: I00-I09

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 109–116

4. Pulmonary diseases consists of pneumonia, influenza, emphysema, bronchitis, and chronic airways obstruction.

f. Growth conditions (A) Agar: composed of (GDS-10) under: 45

© 2000 Blackwell Science Ltd, *Journal of Internal Medicine* 247: 395–402





“50 YEARS AFTER THE FIRST SURGEON GENERAL’S REPORT, RESEARCH CONTINUES TO IDENTIFY DISEASES CAUSED BY SMOKING, INCLUDING: DIABETES MELLITUS, RHEUMATOID ARTHRITIS, AND COLORECTAL CANCER.”

### Cancers

Oropharynx  
Larynx  
Esophagus

Trachea, bronchus, and lung

Acute myeloid leukemia

Stomach

**Liver**

Pancreas

Kidney

and ureter

Cervix

Bladder

**Colorectal**

### Chronic Diseases

Stroke

Blindness, cataracts, **age-related macular degeneration**

**Congenital defects—maternal smoking: orofacial clefts**

Periodontitis

Aortic aneurysm, early abdominal aortic  
atherosclerosis in young adults

Coronary heart disease

Pneumonia

Atherosclerotic peripheral vascular disease

Chronic obstructive pulmonary disease, **tuberculosis**,  
asthma, and other respiratory effects

**Diabetes**

Reproductive effects in women  
(including reduced fertility)

Hip fractures

**Ectopic pregnancy**

**Male sexual function—erectile dysfunction**

**Rheumatoid arthritis**

**Immune function**

Overall diminished health





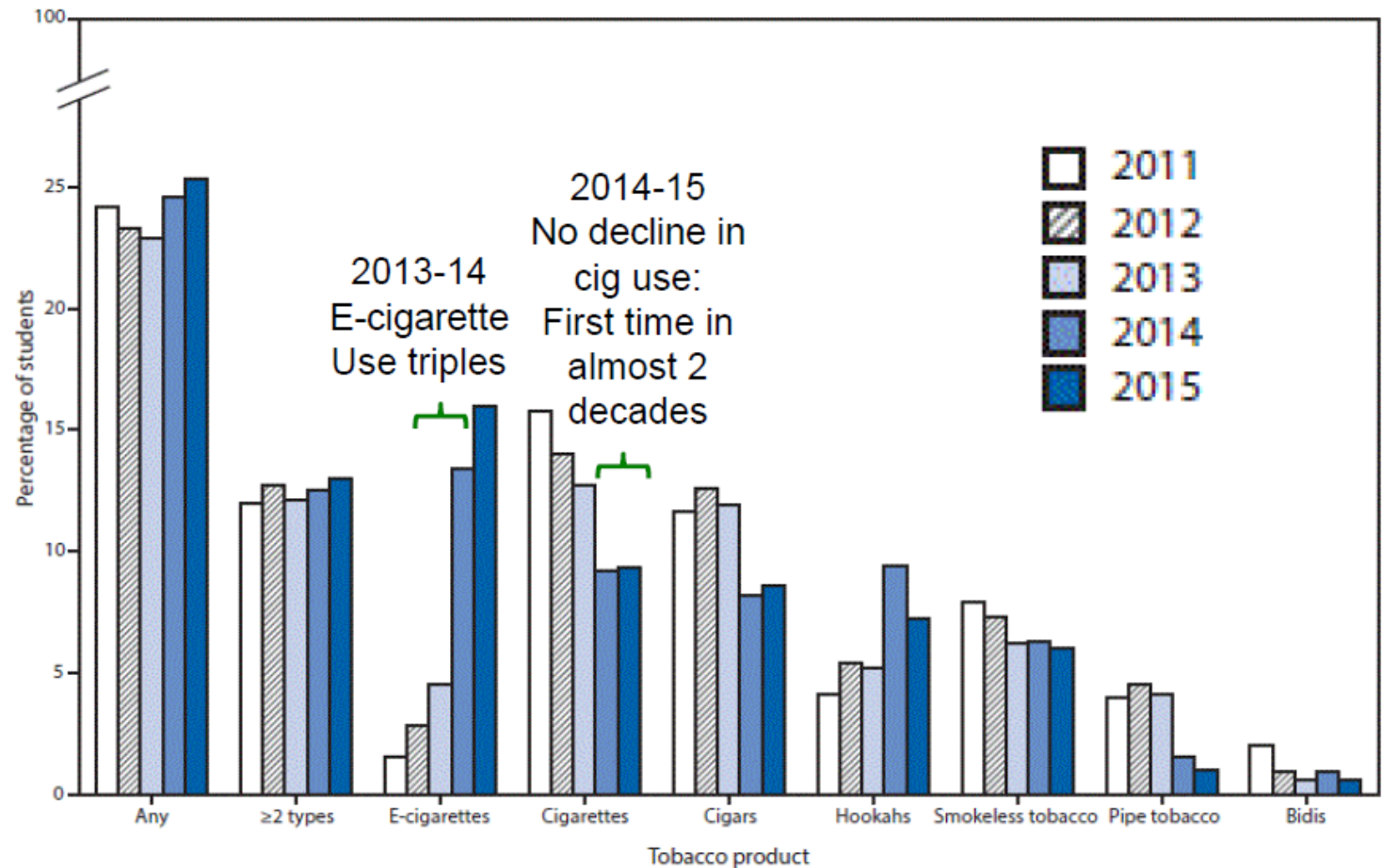
LIVE WELL  
SAN DIEGO



**90%** OF TODAY'S ADULT SMOKERS IN  
THE U.S. BEGAN SMOKING BY THE TIME THEY  
WERE **18 YEARS OLD<sup>2</sup>**



# High School Student Tobacco Use National Youth Tobacco Survey (NYTS)

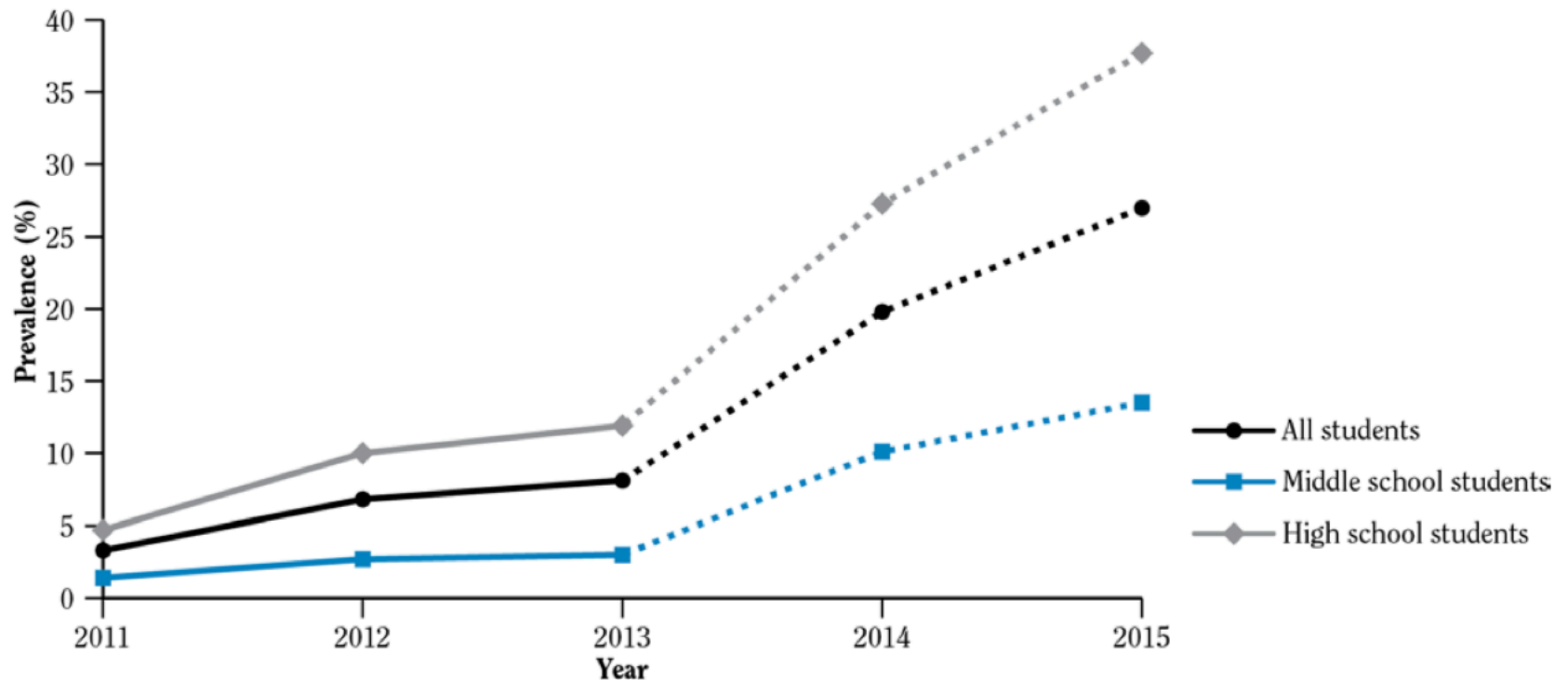


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SAN DIEGO





**Figure 1 Trends in ever e-cigarette use<sup>a</sup> among U.S. middle and high school students; National Youth Tobacco Survey (NYTS) 2011–2015**



Source: Centers for Disease Control and Prevention 2013, 2014; unpublished data (data: NYTS 2015).

Note: In 2014, modifications were made to the e-cigarette measure to enhance its accuracy, which may limit the comparability of this estimate to those collected in previous years. The dotted lines from 2013 to 2015 represent these differences.

<sup>a</sup>Includes those who responded “yes” to the following question: “Have you ever used an electronic cigarette or e-cigarette, even once or twice?”



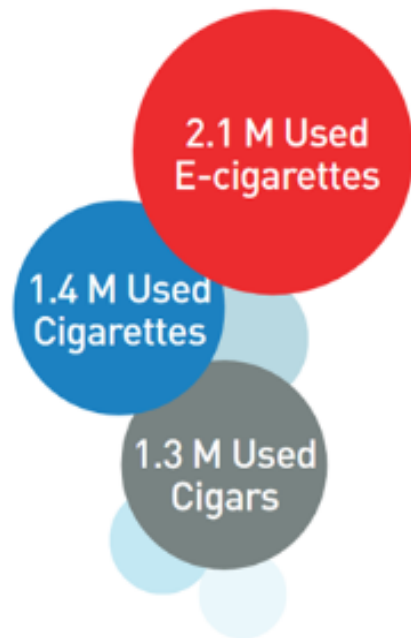
# FINDINGS FROM THE 2017 NATIONAL YOUTH TOBACCO SURVEY (NYTS)

FDA

- NYTS is the only nationally representative survey of middle and high school students that focuses exclusively on tobacco use
- Over the past several years, e-cigarettes were the most commonly used tobacco product by youth
- More than 2 million middle and high school students were current users of e-cigarettes in 2017
- Recent rise in use of a particular brand (JUUL) and its eponymous verb (“JUULing”)

## Most Used Tobacco Products in 2017

E-cigarettes continue to be the most commonly used tobacco product among middle and high school students.





# THE PRODUCTS



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# E-CIGARETTES ARE ALSO CALLED:

E-cigs



E-hookahs



Shisha Pens



Vapor pens



Vapes



Vape pens



Vape pipes



MODs



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# ILLEGAL TO SELL TO THOSE UNDER 21



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California law prohibits the sale of e-cigarettes to minors  
(California Health and Safety Code § 119405).



Dry Herb Vaporizers are designed with  
discretion in mind





# A CHANGING RISK ENVIRONMENT



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High concentration of  
nicotine and new  
nicotine salt technology

Unfettered marketing on  
social media

Fruit and other flavors

Widespread availability  
where kids shop







Suorin



Phix



Rubi



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# JUUL: 70% OF THE MARKET

## JUUL flavor pods

The juice-flavored pods contain 50 milligrams of nicotine, roughly equivalent to a pack of cigarettes.



## Design

The design of the e-cigarette is about the same size as a cigarette and weighs a couple of grams.



## Charging dock

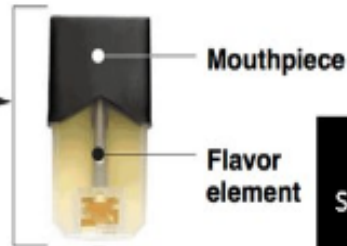
It looks like a USB thumb drive

Body



## USB charging dock

The battery is charged by dropping the body on a magnetic USB adapter. It takes an hour to fully charge and will last up to 200 puffs, a full day of regular use.



Mouthpiece

Flavor element



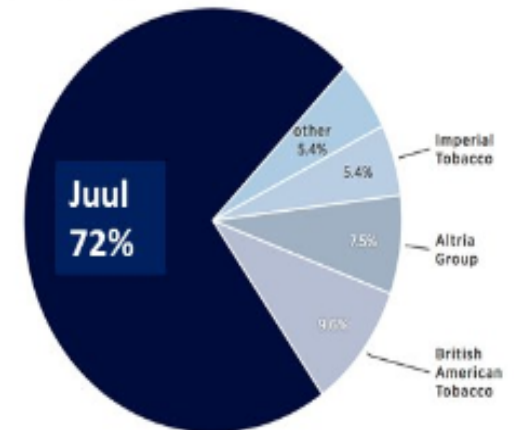
Body

Most of the e-cigarette's body is designed to contain a built-in battery.

JUUL Lab's mission is to eliminate cigarette smoking by offering existing adult smokers with a better alternative to combustible cigarettes

## Juul dominates the U.S. e-cigarette market

Juul Labs represented 72.2 percent of dollar market share in the four-week period ended Aug. 11 2018, according to Nielsen data.



Source: Wells Fargo

CNBC





## Constituents of “e-juice”: humectant, flavoring, +/- nicotine

- GRAS classification:
  - Generally recognized as safe for use IN FOOD
  - Based on scientific evidence or use before 1958
- GRAS means safe for certain populations, in certain quantities, for ingestion or topical use
- Have NOT been assessed for safety as inhalants





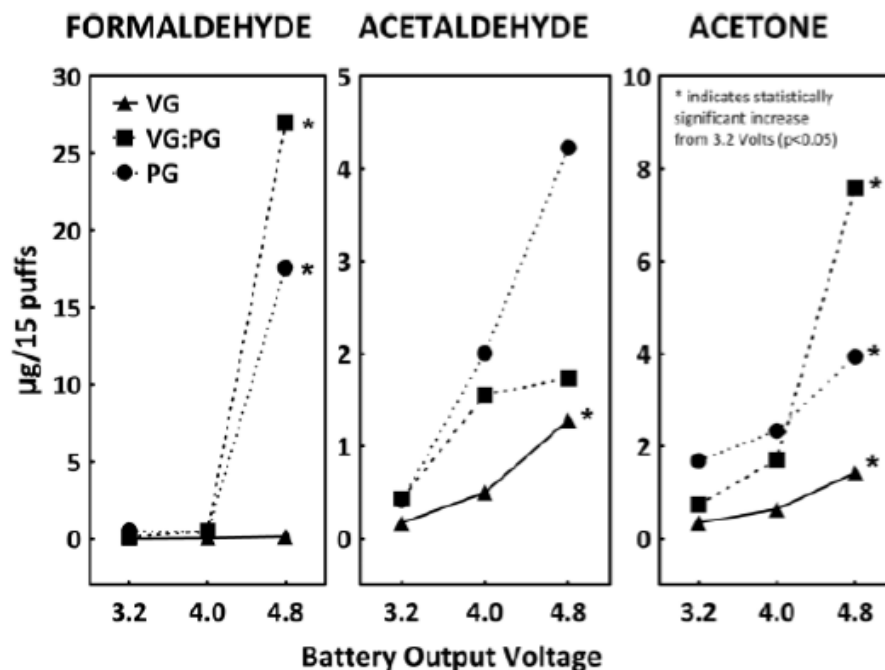
## Constituents of e-juice: Humectants

- Propylene glycol: general recognized as safe
  - Few human studies for inhalation, used as a tobacco humectant historically
    - Can cause eye and respiratory irritation
    - Dow Chemical states “inhalation exposure to mists should be avoided”
    - Altria published a study in rats and dogs in 2011, stating a plan to conduct “first-time-in-man” human exposure studies
- Vegetable glycerin: generally recognized as safe
  - When heated and vaporized, can form acrolein, which can cause upper respiratory irritation
- Unknown long-term health effects





## Humectant Toxicity – heating creates carcinogenic compounds



**Figure 1.** Effects of nicotine solvent and battery output voltage on levels of carbonyl compounds released from ECs (µg/15 puffs;  $N = 3$ ; puff duration 1.8 s, puff volume 70 ml, puff intervals 17 s).





# KEY ISSUES

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# E-cigarettes and Nonsmoking Youth



**Among nonsmoking youth, those that have ever used e-cigarettes have greater intentions to smoke conventional cigarettes than those who have never used e-cigarettes**

Bunnell RE, Agaku IT, Arrazola RA, et al. Nicotine Tob Res 2015



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SAN DIEGO



# E-CIGARETTE USE IN 9<sup>TH</sup> GRADERS PREDICTS OTHER TOBACCO USE



- Ever e-cigarette use predicts in 9<sup>th</sup> graders after 6 and 12 months:
  - OR 2.73 (2.00-3.73) Any combustion tobacco product
  - OR 1.75 (1.10-2.77) Combustion cigarettes
  - OR 2.96 (2.00-4.38) Cigars
  - OR 2.26 (1.56-3.29) Hookah
  - OR 2.73 (1.99-3.75) Number of products
  - Odds Ratio (OR)



## Little Cigars



Leventhal et al 2015



# Nicotine Poses Unique Dangers to Young People

## E-Cigarette Use Among Youth and Young Adults

A Report of the Surgeon General



U.S. Department of Health and Human Services

### Chapter 3 Conclusion 1, 2, & 5

1. Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.

2. Nicotine can cross the placenta and has known effects on fetal and postnatal development. Therefore, nicotine delivered by e-cigarettes during pregnancy can result in multiple adverse consequences, including sudden infant death syndrome, and could result in altered corpus callosum, deficits in auditory processing, and obesity.

5. Ingestion of e-cigarette liquids containing nicotine can cause acute toxicity and possibly death if the contents of refill cartridges or bottles containing nicotine are consumed.



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## Prevalence: Ecig Use & Chronic Mental Illness

NHIS 2016 Data (Bianco CL, in press Addict Bxs)

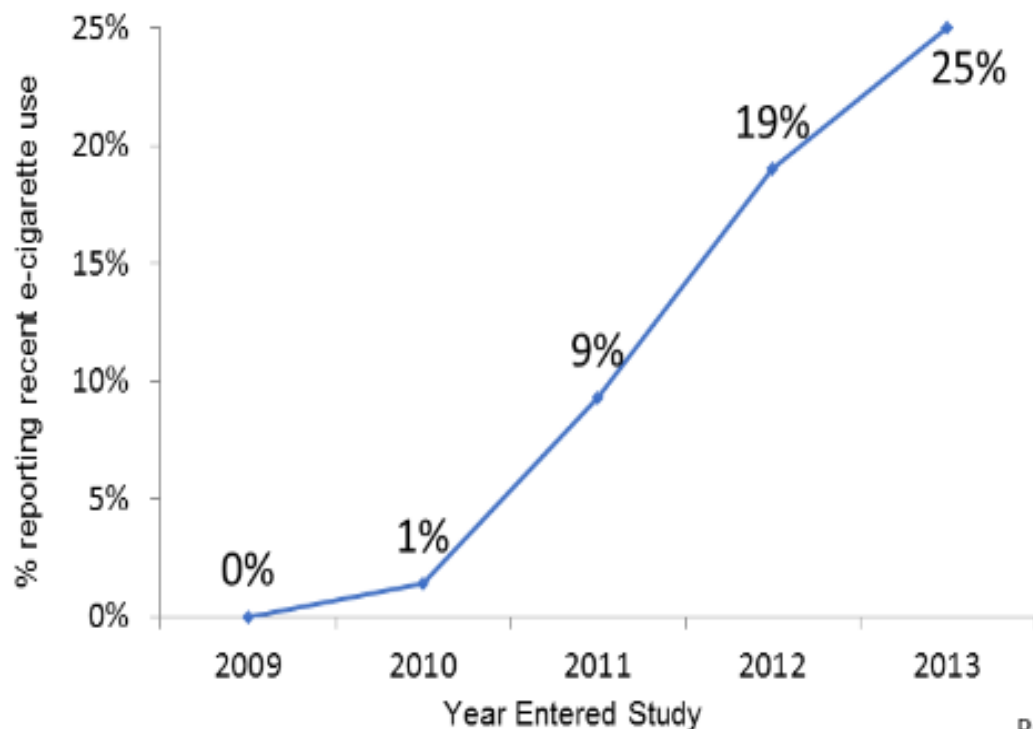
- Nationally representative adult sample N=33,028
  - 97% no chronic mental illness
  - 2.7% chronic depression, anxiety or emotional problem
  - 0.2% chronic ADD, bipolar, schizophrenia or other disorder
- 15% of US adult population tried an e-cig
  - **2.5 to 2.8 xs more likely to try an ecig if have chronic mental illness**
- 3% of US adult population current ecig users
  - **2.7 to 3.0 xs more likely to regularly use ecigs if have chronic mental illness**





## E-CIG USE: SMOKERS with SERIOUS MENTAL ILLNESS (N=956)

### Growth in Reported Ever E-cig Use by Year of Study Enrollment





# THE OPIOID EPIDEMIC & SMOKING

## Quick Facts

**1) SMOKING IS A  
RISK FACTOR FOR  
NONMEDICAL USE  
OF PRESCRIPTION  
OPIOIDS**

**2) DAILY &  
INTERMITTENT  
SMOKERS ARE  
**3X** MORE  
LIKELY TO  
REPORT  
PAST-YEAR  
NONMEDICAL  
PRESCRIPTION  
OPIOID USE**

**3) THERE IS A  
SIGNIFICANT  
ASSOCIATION  
BETWEEN  
SMOKING &  
PAIN**

# 85%

**4) OF PATIENTS IN TREATMENT FOR  
OPIOID ADDICTION  
SMOKE**

(HIGHER THAN ALCOHOL USE DISORDER)

**5) NICOTINE MAY  
ENHANCE THE  
REWARDING  
PROPERTIES OF  
OPIOID MEDICATIONS  
TO THE NEURAL  
SYSTEM**

**6) PAIN CAN  
INCREASE SMOKING  
AND THE  
MAINTENANCE OF  
TOBACCO ADDICTION  
CREATING A POSITIVE  
FEEDBACK LOOP**

**7) ACTION STEP:  
ALWAYS TAKE INTO ACCOUNT  
TOBACCO USE WHEN ASSESSING  
THE ABUSE POTENTIAL OF  
PRESCRIBING OPIOIDS**

[For References Click Here](#)

Smoking Cessation  
Leadership Center  
**UCSF**  
University of California



# PROBLEM: NO HELP WITH QUITTING



- Youth Initiation
- Dual Use
- Former Smokers
- Delays Quit Attempts
- Enforcement complexities
- Erosion of cultural norm



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# EXPLOSIONS




DEA: San Diego County is becoming the marijuana extraction capital of the U.S.

LOCAL TOPICS PUBLIC SAFETY

## Two hurt in PB drug-lab blast

By **Pauline Repard** 8:53 P.M. SEPT. 24, 2013 Updated 11:17 P.M.



Police investigate a narcotics related explosion in an apartment in an alley between the 210 Avenue and Thomas Avenue in Pacific Beach on Tuesday night. A police detective at the scene says suspects in the apartment were burned in an explosion caused while making hash oil. The suspects were taken to a hospital burn center. / Hayne Palmour IV

**PACIFIC BEACH** — Two men in their 20s were injured while making operation blew up a Pacific Beach apartment Tuesday night, police and fire officials said.

The blast blew out windows at the building along an alley between Grand and Thomas avenues, near Noyes Street, about 100 feet from the street, police and fire officials said.

Witnesses said an apartment was on fire, but any flames were quickly extinguished when firefighters got there, fire spokesman Maurice Luque said.

13 COMMENTS

## 3 injured in San Diego explosion after suspects light cigarette near hash oil

Like 129 people like this. Be the first of your friends.

By Stephen C. Webster  
Thursday, January 31, 2013 13:59 EDT



Three people were seriously injured Wednesday after a container of butane exploded in a San Diego hotel room as two suspects tried to make hash oil out of marijuana, police told **The Associated Press**.

Although hotel room explosions are usually associated with making methamphetamines, they can happen any time an accelerant is improperly used, such as in the production of hash oil, a form of marijuana that is super-concentrated in liquid form, with roughly one drop equaling the amount of THC in a lower-potency joint.

Following Wednesday's blast, police said they found butane canisters that had apparently been ignited by a cigarette. The accelerant is used to extract THC from portions of the marijuana plant not usually smoked, then cooked off over a stove, leaving behind a viscous, tar-like residue.

The two suspects are both around 20 years old, officials said. A man in an adjacent room was also severely injured and suffered burns over most of his body.

Though rare, a similar incident occurred in

AVAILABLE ONLINE ONLY



## DEA sees rise in hash oil explosions in San Diego County

At least 3 significant explosions in past year



Recommend 48 people recommend this. Be the first of your friends.  
Tweet 7

Posted: 04/16/2013  
Last Updated: 163 days ago



Melissa Mecija | Email Me

**SAN DIEGO** - Drug Enforcement Administration officials say they are seeing an increase in hash oil explosions in San Diego.

In the past 12 months, law enforcement has responded to three significant hash oil explosions, including one in January at the Heritage Inn that burned three people.

"Had it been early in the morning or later in the evening, we could have been talking about a number of people who were fatalities or a good number of people who were injured," said Patrick Kelly, acting assistant special agent in charge of the DEA's Narcotic Task Force.

Significant explosions include the one at Heritage Inn near Sea World, as well as two others in San Diego County.

At least six other hash oil extraction labs locally, but fortunately no explosions were reported.

The main profit is money, with a gram of hash oil yielding anywhere between \$30 to \$80 locally, said the availability of the process on Internet sites like YouTube adds to the problem.

provide you with an indication of just how dangerous that procedure can be," Kelly said.

Recent message from the marijuana community over the last several years that, in San Diego, the DEA is seeing an increase in hash oil explosions in San Diego.



# Battery issues?

**A 17-year-old says he suffered third-degree burns to his leg when a vape pen battery exploded in his pocket.**



Go Fund Me / Via gofundme.com



KDVR / Via kdvr.com



Go Fund Me / Via gofundme.com

**The teenager's left leg was charred from his thigh to his calf, and he suffered second- and third-degree burns.**



KDVR / Via kdvr.com

<http://www.buzzfeed.com/stephaniemcneal/vape-pen-horror#.fj0pJ906Z>

Feb 29, 2016

Julius B. Richmond  
Center of Excellence



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# EXPLOSIONS AND POISONINGS



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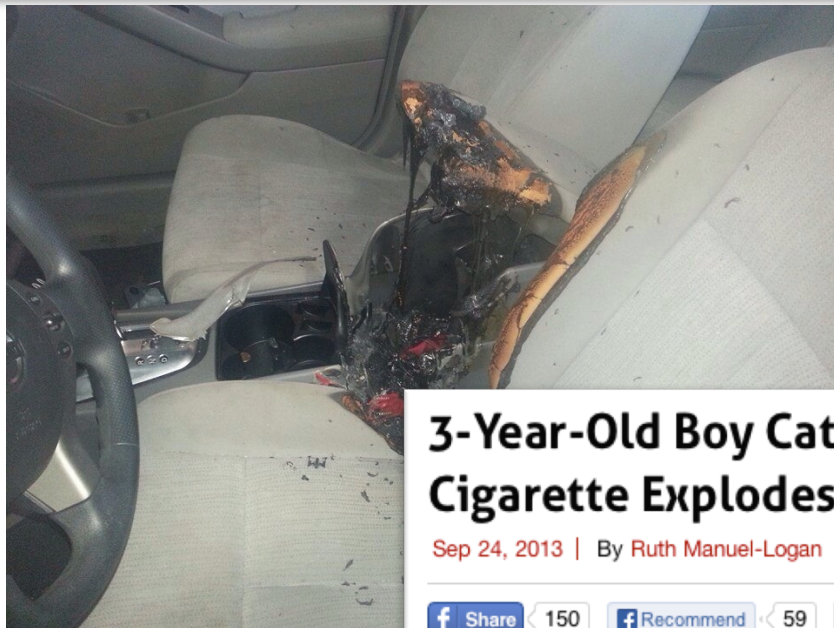
## Liquid nicotine can poison kids

8:46 AM, Nov 12, 2012 | 29 comments

Exploding e-cigarette could have killed my dogs and cats, terrified Atlanta woman says



Dylan Stableford, Yahoo! News September 4, 2013 12:19 PM  
The Sideshow



### LATEST NEWS

## Man Loses Teeth and Part of Tongue in Electric Cigarette Explosion

MELISSA NELSON, Associated Press

February 15, 2012 4:07 PM

## 3-Year-Old Boy Catches Fire When Mom's E-Cigarette Explodes

Sep 24, 2013 | By Ruth Manuel-Logan

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150

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59

Twitter Tweet

44

Email

Share

75



# Marijuana



## SATIVA Complete Set

DAYTIME • 500MG

An uplifting and stimulating sativa dominant blend of all-natural organic cannabis oil. Perfect for daytime, sativa provides an energetic and enhanced state of well-being.

Includes battery, 500mg cartridge, and USB charger. Everything you need to get started with a 100% lifetime guarantee.

## INDICA Complete Set

NIGHTTIME • 500MG

A calm and relaxing indica dominant blend. Perfect for nighttime, indica provides a relaxation, pain relief, and can be a powerful tool for inducing deep sleep.

Includes battery, 500mg cartridge, and USB charger. Everything you need to get started with a 100% lifetime guarantee.

Getbloomfarms.com  
AMERICAN ACADEMY OF PEDIATRICS  
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Which account for 2:3 deaths  
among long-term smokers

Yes, less harmful than combustibles, but...  
that doesn't mean ecigs are safe

- **Nicotine**

- Toxic to developing fetuses
- Harm adolescent brain development, which continues into the early to mid-20s
- Can be highly addictive

- **Cancer-causing chemicals**

- **Tiny particles into lungs**

- Fewer harmful chemicals than smoke from burned tobacco products

- **Unintended injuries**

- Defective batteries have caused fires and explosions, most happened when the e-cig batteries were being charged, stored improperly, modif.
- Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes

CDC



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# WAXY MARIJUANA AND HASH OILS



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Wax marijuana is the purest form of cannabis. It contains from 82-99% THC making it several times more potent than a marijuana bud on a cannabis plant which usually contains 5-28% THC. One hit of the wax is supposedly equal to 1-2 full cannabis joints and is reported as being more clear and longer lasting than average marijuana. Wax marijuana is also a medical marijuana product.

**Hash oils** are concentrated and extremely potent. They are made through a volatile chemical process utilizing butane as a solvent.

**Wax** (extracted cannabinoid product) is a form of hash oil. The typical wax product is often golden in color and crumbly.







## Butane Hash Oil

Wax and Hash oils are often smoked using **Vape - Pens or E cigarette type devices**



- The process for making Hash oil involves using Butane gas to extract higher levels of THC.

**Butane gas is colorless odorless and highly flammable.**

- Butane is used as a solvent for hash oil extraction because it separates herbal oils from mostly useless marijuana plant/bud matter. This type of filtered oil is sometimes nicknamed "Hash or Honey Oil" because the results are similar in color and consistency to amber honey.
- In September 2013, two men in Pacific Beach were burned attempting to make Butane Hash Oil (BHO).

Highly potent forms of marijuana such as Wax and Honey Oil or Hash Oil are made using this process. **THC levels can vary from 60% to 90% using this extraction method.**



**MPI**  
Marijuana  
Prevention  
Initiative  
San Diego County

*Vapor Rush*



100% Pure Cannabis  
Kief In E-Gig

No Carcinogens

No Smell

Safe and Convenient

[www.vaporrush.com](http://www.vaporrush.com)







# PROVEN SOLUTIONS: POLICIES WORK

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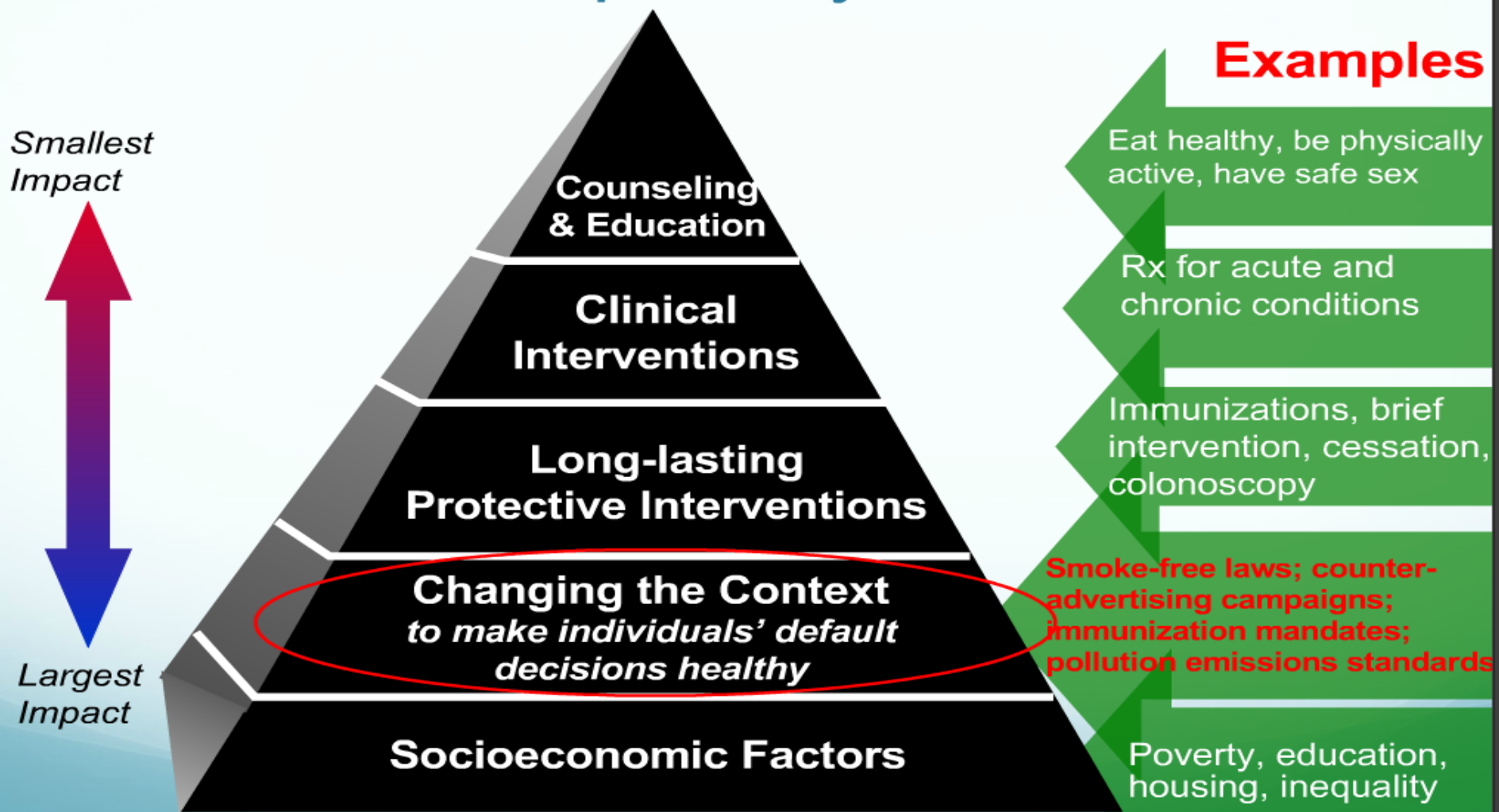
# PROVEN SOLUTIONS







# Health Impact Pyramid







Secondhand  
**smoke can  
infiltrate** into  
other units  
**through  
hallways** and  
**stairwells.**

Don't be shy when it comes to your health. Talk to your building manager about making your apartment smokefree.

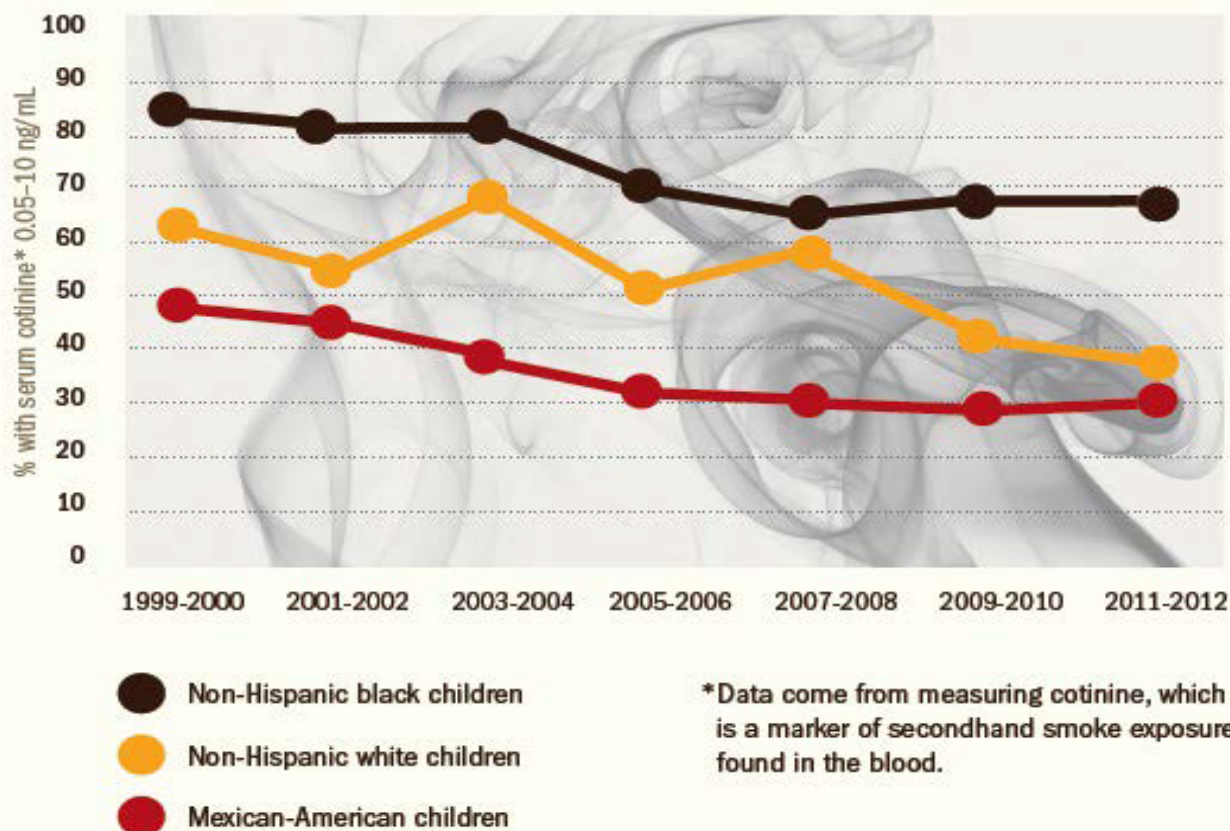


CDC.gov





## Exposure to secondhand smoke differs among children ages 3-11 by race/ethnicity



SOURCE: National Health and Nutrition Examination Survey Data 1999-2012.

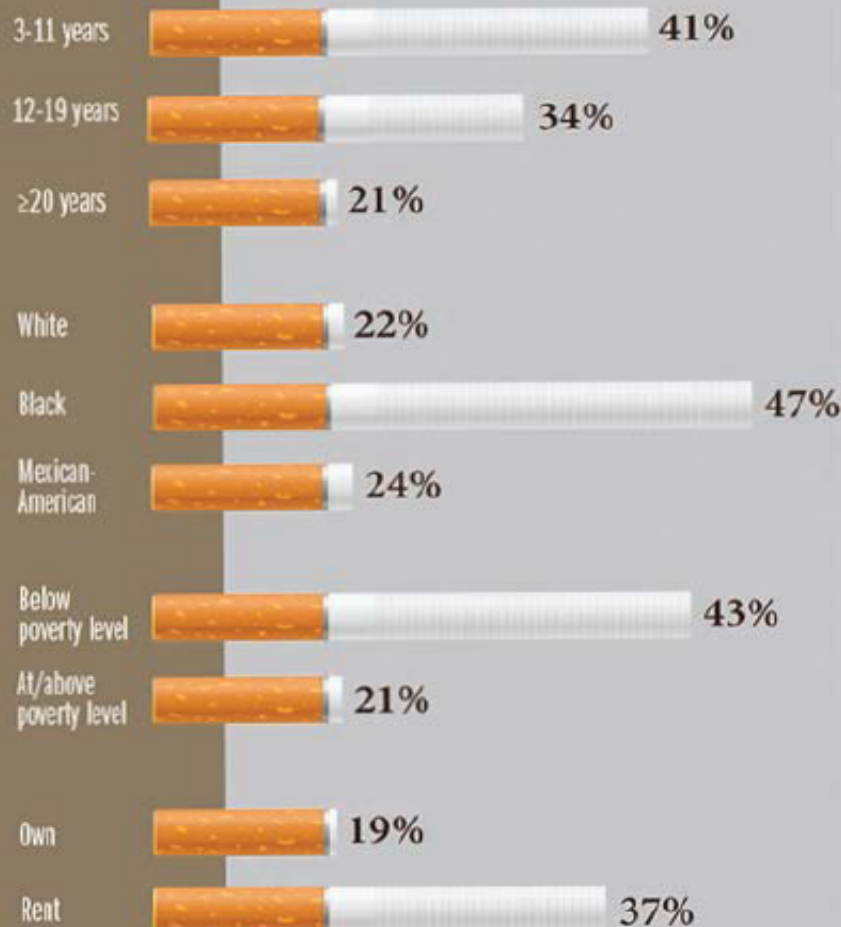


# Some groups have higher exposure to secondhand smoke and its harmful effects



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NON SMOKING AMERICANS



SOURCE: National Health and Nutrition Examination Survey Data 1999-2012.





## Lack of time

Contact time	Estimated quit rate*
None	11.0%
1-3 minutes	14.4%
4-30 minutes	18.8%
31-90 minutes	26.5%
90-300 minutes	28.4%
>300 minutes	25.5%

\* 5 months (or more) of tobacco abstinence

US DHHS Fiore, et al. (2008) *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.*

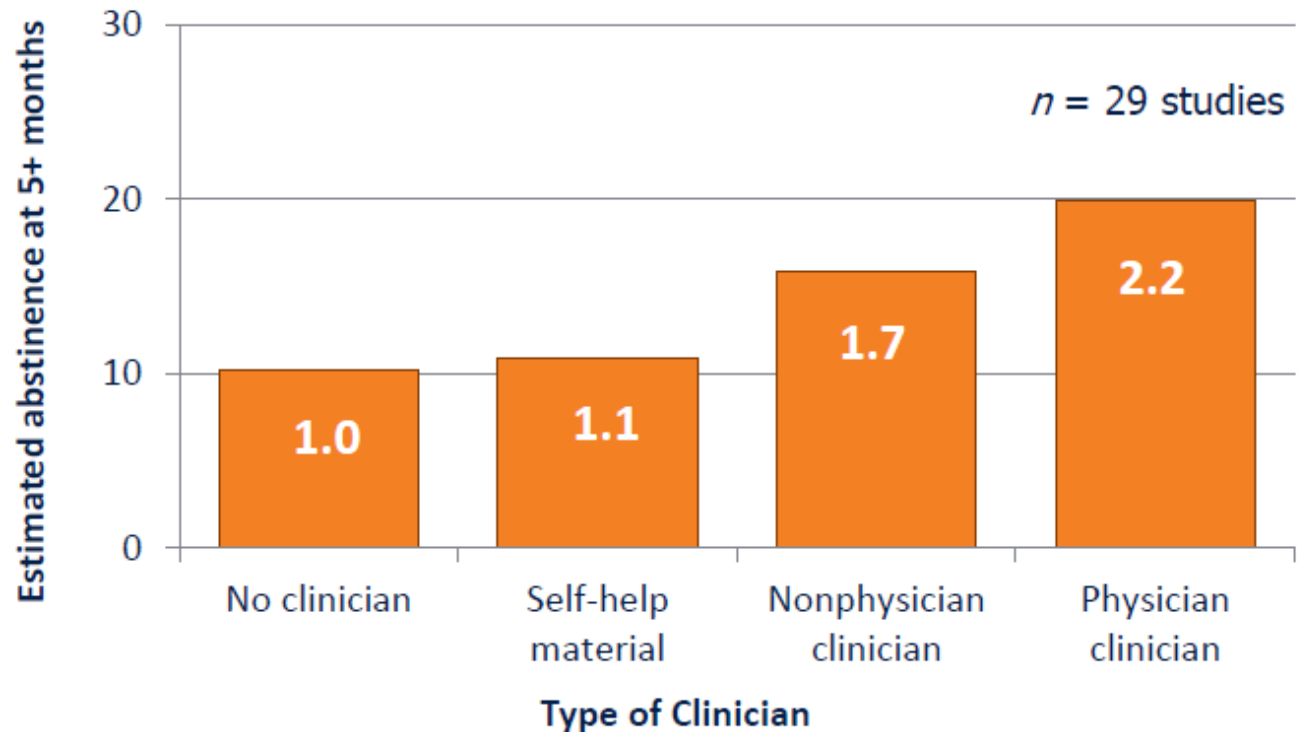
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# Effects of clinician interventions



**Compared to patients who receive no assistance from a clinician, patients who receive assistance are 1.7–2.2 times as likely to quit for 5 or more months.**

US DHHS Fiore, et al. (2008) *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.*

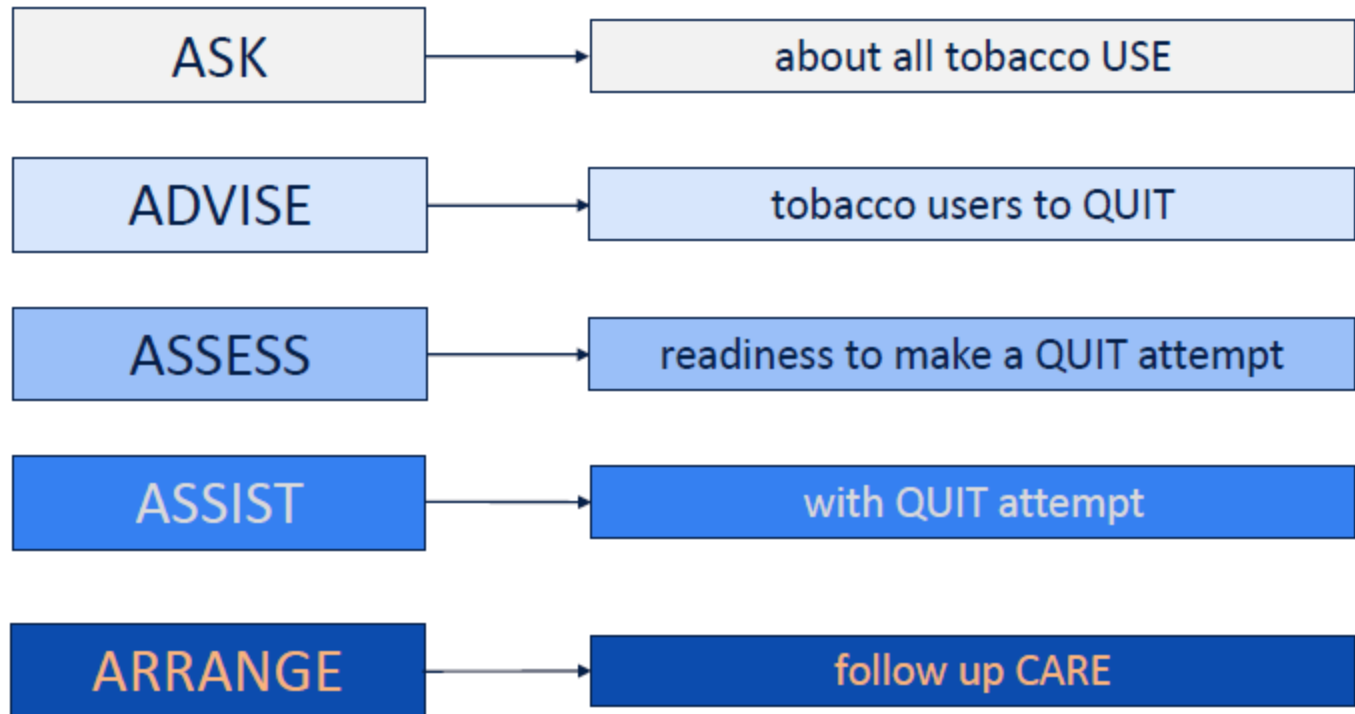
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# The 5 A's: Ask, Advise, Assess, Assist, Arrange



US DHHS Fiore, et al. (2008) *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.*

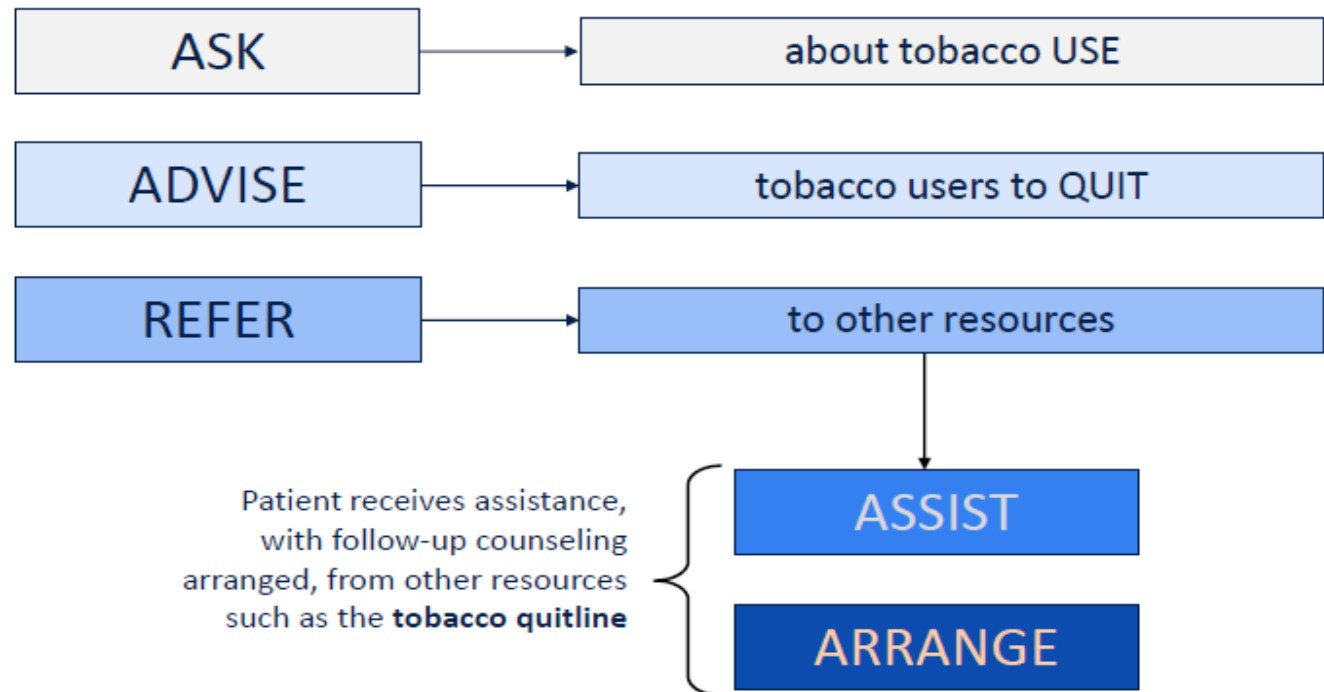
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# Brief Counseling: ASK, ADVISE, REFER



US DHHS Fiore, et al. (2008) *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.*

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# CESSATION: EVIDENCE-BASED



- Education/Training – curricula, CEU, CME, staff
  - 5 As: Ask, Advise, Assess, Assist, Arrange
  - Ask, Advise, Refer (A-A-R),
  - Ask-Advise-Connect (A-A-C)

**Ready to Quit Smoking?**



**1-800-NO-BUTTS**

This material was made possible by funds received from  
the California Department of Public Health, under contract # TCP-07-37





- Use evidence-based interventions
  - Do tobacco cessation in treatment settings
  - Use nicotine replacement therapies (NRTs)
- Ensure smoke-free work and treatment facilities





## **Influencing Policy and Legislation**

**Changing organizational practices**

**Fostering coalitions and networks**

**Educating Providers**

**Promoting Community Education**

**Strengthening individual knowledge and skills**





# THANK YOU

## QUESTIONS?

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On May 17, 2016, the County of San Diego Health and Human Services Agency Division of Public Health Services received accreditation from the Public Health Accreditation Board.